

# Specimen Label



# Dursban<sup>\*</sup> 50W

## Specialty Insecticide

\*Trademark of Dow AgroSciences LLC

**To be applied only by or under the direct supervision of trained applicators responsible for insect control programs.**

### Active Ingredient:

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate	50%
Inert Ingredients	50%
Total	100%

EPA Reg. No. 62719-72

## Precautionary Statements

### Hazards to Humans and Domestic Animals

**Keep Out of Reach of Children**

# WARNING

# AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**May Be Fatal If Swallowed • Harmful If Inhaled Or Absorbed Through Skin • Causes Eye Irritation**

**Do not get in eyes, on skin, or clothing. Avoid breathing dust and spray mist. Keep away from food, feedstuffs, and water supplies.**

### Personal Protective Equipment (PPE)

**WPS Uses:** Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) -- in general, agricultural-plant uses are covered -- must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

**Non-WPS Uses:** Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) -- in general, only agricultural-plant uses are covered by the WPS -- must wear:

**When exposure to spray mist is likely to occur, protective equipment and clothing:**

- Long-sleeved shirt and long pants
- Eye protection
- Waterproof gloves
- To prevent breathing of spray mist during application in confined areas, wear a respirator and cartridge(s) approved by MSHA/NIOSH for pesticides (approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## First Aid

### Organophosphate

**If swallowed:** Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention.

**If in eyes:** Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

**If inhaled:** Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

**Note to physician:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

## Environmental Hazards

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**Notice:** Read the entire label. Use only according to label directions.

**Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at [www.dowagro.com](http://www.dowagro.com).

**Agricultural Chemical:** Do not ship or store with food, feeds, drugs or clothing.

## Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

**Do not apply this product through any type of irrigation system.**  
**Do not formulate this product into other end-use products.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

### Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

- Adults, children, and pets should not contact treated surfaces until the spray has dried.

### Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

**Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 122°F for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below. Packets may become brittle when stored below 32°F. Handle carefully to avoid breakage.

**Pesticide Disposal:** Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** When all packets are used, dispose of empty package in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## General Information

Dursban® 50W In Water Soluble Packets insecticide is a wettable powder formulation designed for use as a spray to control various pests injurious to trees, turf, and ornamental plants. The pests controlled are listed in the accompanying tables. Dursban 50W is compatible with insecticides, miticides, and fungicides commonly recommended except for alkaline materials such as Bordeaux mixture and lime. A small amount of spray mixture should be prepared to check for compatibility before a large volume of spray is mixed.

**Attention:** Keep out of fishpools and other bodies of water. Do not treat vegetable gardens. Do not allow livestock to graze in treated areas. Do not feed treated grass cuttings (hay) or seed screenings to livestock or use hay for livestock bedding. Do not use in poultry houses or greenhouses.

### Handling Precautions for Water Soluble Packets

Do not allow packets to become wet prior to adding to the spray tank. Wear gloves when handling water-soluble packets. Do not handle with wet gloves. Do not handle water-soluble packets excessively since this may cause breakage. Reseal outer package to protect remaining packets. Packets may become brittle when stored below 32°F. Handle carefully to avoid breakage.

### Mixing Directions

For paddle, sparger, and bypass agitation systems.

1. Fill the spray tank 1/3 full of water.  
**Note:** For paddle agitation systems, paddles should be covered with water.
2. Activate agitation system.
3. Add required number of water-soluble packets to obtain desired dilution.
4. Complete tank filling while the packet(s) dissolve and Dursban 50W disperses.
5. Before beginning to spray, make sure water-soluble packet(s) have dissolved and Dursban 50W has completely dispersed.

**Note:** Depending on the water temperature and amount of agitation, the packets and Dursban 50W should be completely dispersed within approximately 5 minutes after adding to water.

## Approved Uses

### Pest Control on Outside Surfaces, Around and Under Structures or in Crawl Spaces

Apply Dursban 50W by application as a residual spray to outside surfaces, around and under structures or buildings including porches, window frames, eaves, patios, crawl space areas, garages, refuse dumps, and other areas where pests congregate or have been seen. Repeat treatment as needed to maintain effectiveness. Avoid application to surfaces where visible residues are objectionable.

**Note:** Numbers in parentheses following a listed pest or use site refer to Pest-Specific Directions following table.

Pest		Amount of Dursban 50W in Water to Make 50 Gallons of Diluted Spray
Ants	Millipedes	<b>Perimeter Treatment (1)</b> 1/4 to 1 lb (one to four 4 oz packets)  <b>Note:</b> One 4 oz packet of Dursban 50W in 50 gallons of water equals a chlorpyrifos concentration of 0.03%  <b>On Outside Surfaces</b> 4 lb (sixteen 4 oz packets)  <b>Under Structures or in Crawl Spaces (3)</b> 1/4 to 1 lb (one to four 4 oz packets)
Bees	Mosquitoes	
Boxelder bugs	Pillbugs	
Carpenter ants	Scorpions (2)	
Clover mites	Silverfish	
Cockroaches	Sowbugs	
Crickets	Spiders	
Earwigs	Springtails	
Elm leaf beetles (adults)	Symphylans	
Firebrats	Ticks	
Fleas	Wasps	
Flies	Yellowjackets	
Hornets		

#### Pest-Specific Directions

- To help prevent infestation of buildings, treat a band of soil 6 to 10 feet wide around and adjacent to buildings, also the building foundation to a height of 2 to 3 feet, where pests are active and may find entrance. Use 4 to 16 ounces (one to four 4 oz packets) of Dursban 50W per 50 gallons of water and apply as a coarse spray at the rate of about 10 gallons spray mixture per 1,000 sq ft to thoroughly and uniformly wet the band area.
- For **scorpions**, remove accumulations of lumber, firewood, and other materials which serve as harborage sites. Dursban 50W may be applied as a residual spray to surfaces immediately below such materials. Perimeter treatments may reduce pest immigration from surrounding areas.
- Apply spray to foundation areas, cracks and crevices, along sill line, foundation vents, door frames and other areas where pests may find entry or harborage. Apply up to 10 gallons per 1,000 sq ft depending on surface texture and type of surface. Use low pressure to minimize splashback. Avoid puddling.

### Ornamentals Growing Outdoors or in Nurseries

Use Dursban 50W insecticide to treat flowers, shrubs, evergreens, vines, shade and flowering trees, and non-bearing fruit trees found to be infested with the types of pests listed in the following tables including: (1) Sucking Insects and Mites; (2) Defoliators and Leafminers; (3) Borers, Bark Beetles and Weevils; and (4) Ants, Termites, and Miscellaneous Pests.

Dilute Dursban 50W insecticide with water according to directions given in the table and apply using suitable hand or power-operated spray equipment in a manner to provide complete and uniform coverage. Attempt to penetrate dense foliage, but avoid over spraying to the point of excessive runoff. For nurseries: when using spray equipment delivering less than 200 gallons of finished spray per acre, use the rate recommended in the per acre column. Uniform coverage is critical for effective insect control.

**Note:** Numbers in parentheses following a listed pest refers to Pest-Specific Directions following each table.

Consult your State Agricultural Experiment Station or Extension Service Specialist for application timing and other specific use information

**Note: Phytotoxicity:** Environmental factors and varietal differences have significant effects on phytotoxic expression. Dursban 50W insecticide has been tested on numerous ornamental plants without causing serious phytotoxicity at recommended use rates. Before treating large numbers of plants, it is recommended that a small block of plants be sprayed and observed for 7 to 10 days to determine phytotoxic potential.

#### (1) Sucking Insects and Mites (Ornamentals Growing Outdoors or in Nurseries)

Pest	Amount of Dursban 50W per	
	100 gallons	Acre
Adelgids (such as: Cooley and Eastern spruce galls, Pine bark) Aphids (Such as: Apple, Balsam twig, Black pecan, Chrysanthemum, Cottonwood, Crape myrtle, Elm leaf, Melon, Peach, Rose, Spirea, White pine, Woolly apple, Yellow pecan) Boxelder bugs Lace bugs (such as: Hawthorn) Leafhoppers Periodical cicada Plant bugs Psyllids Spittlebugs Thornbug Whiteflies	0.5 to 1 lb (two to four 4 oz packets)	1 to 2 lb (four to eight 4 oz packets)
Leafhoppers Mealybugs (Such as: Citrus, Taxus) Mites (Such as: Clover, Red spider, Southern red) (1) Thrips (exposed)	1 lb (four 4 oz packets)	2 lb (eight 4 oz packets)
Scale insects (Such as: Cottonycushion, Cottony maple, Dearness, Euonymus, Fletcher, Florida wax, Golden oak, Hemispherical, Lecanium, Magnolia, Oak kermes, Oystershell, Pine needle, San Jose, Tea, White birch) (2)	2 lb (eight 4 oz packets)	2 to 4 lb (eight to sixteen 4 oz packets)

#### Pest-Specific Directions

- For effective control of **spider mites** when large numbers of eggs are present, apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly hatched nymphs.
- Time applications for control of **scale insects** when crawlers or first two stages of settled scales are present.

**(2) Defoliators and Leafminers (Ornamentals Growing Outdoors or in Nurseries)**

Pest		Amount of Dursban 50W per	
		100 gallons	Acre
Armyworms (Such as: Fall, Yellowstriped)	Orange tortrix	0.5 to 1 lb (two to four 4 oz packets)	1 to 2 lb (four to eight 4 oz packets)
Bagworms (1)	Poplar tentmaker		
Cankerworms	Puss caterpillars		
Catalpa sphinx	Rose chafers		
Elm spanworms	Sawflies, exposed (Such as:		
Fall webworms	European pine, Pine, Pin oak,		
Grasshoppers	Redheaded)		
Greenstriped mapleworms	Spring elm caterpillars		
Green fruitworms	Springtails		
Hornworms	Spruce budworms		
Jackpine budworms	Tent caterpillars (Such as: Eastern,		
Juniper webworms	Forest, Western)		
Katydid	Walnut caterpillars		
Leafrollers (2)	Western spruce budworms		
Maple leafcutters (3)	Yellownecked caterpillars		
Oak skeletonizers			
Oleander caterpillars			
Balsam gall midge	Mimosa webworms	1 lb (four 4 oz packets)	2 lb (eight 4 oz packets)
Beet armyworms	Nantucket pine tip moth		
Beetles (Such as: Fuller rose, Native elm bark) (5)	Oakworms (such as: California, Orangestriped, Redhumped)		
Browntail moth	Pandora moth		
Cutworms	Pitch pine moth		
Cypress tip moth	Redhumped caterpillars		
Douglas fir tussock moth	Subtropical pine tip moth		
European pine shoot moth	Tussock moth		
Gypsy moth (4)			
Holly bud moth			
Mahogany webworms			
Beetles (Such as: Cottonwood leaf, Elm leaf, Flea, Willow leaf) (6)		1 to 2 lb (four to eight 4 oz packets)	2 lb (eight 4 oz packets)
Leafminers		2 lb (eight 4 oz packets)	2 to 4 lb (eight to sixteen 4 oz packets)
Needleminers (Such as: Jeffrey pine, Lodgepole pine, Spruce)			
Pine needle midge			

**Pest-Specific Directions**

1. For **bagworms**, treat when larvae are small and actively feeding.
2. For effective control of **leafrollers**, spray should be applied before leaves are tightly rolled.
3. For **maple leafcutter** on maple trees, apply spray to larvae as cases are being formed. Do not treat sugar maple trees intended for maple syrup production.
4. To control migrating and invading **gypsy moth larvae**, treat trunks and foliage.
5. To reduce twig and branch feeding by bark beetles, applications should be made in the spring or early summer.
6. For cottonwood leaf beetles, use Dursban 50W in water to control larvae and adults infesting cottonwoods. Make the treatment when field counts indicate damaging beetle populations are developing or present.

**(3) Borers, Bark Beetles and Weevils (Ornamentals Growing Outdoors or in Nurseries)**

Pest	Amount of Dursban 50W per	
	100 gallons	Acre
Weevils (such as: Blackvine (1), Cranberry girdler (2), Yellow poplar, Pine reproduction)	1 lb (four 4 oz packets)	2 to 4 lb (eight to sixteen 4 oz packets)

Borers: Clearwing moths (Such as: Ash, Dogwood, Lesser peachtree, Lilac, Oak, Peachtree, Rhododendron), Metallic wood (Such as: Bronze birch, Flatheaded appletree, Twolined chestnut), Longhorned beetles (Such as: Cottonwood, Locust, Red oak) (3)	2 lb (eight 4 oz packets)	-
Pales weevil adults Zimmerman pine moth		
Pales weevil (4) Northern pine weevil (4)	6 lb (twenty-four 4 oz packets)	-

Beetles (Such as: Ambrosia, Anobiidae, Black turpentine, Blister, Cottonwood leaf, Elm leaf, European elm bark, Fuller rose, Japanese, June, Mountain pine, Native elm bark, Southern pine, Spruce, Western pine, Willow leaf) (5)	16 lb (sixty-four 4 oz packets)	-
Weevils (Such as: Northern pine, Pitch eating, Twig) (6)	32 lb (one hundred twenty-eight 4 oz packets)	-

#### Pest-Specific Directions

1. **Blackvine weevils** are night feeders. Late afternoon spraying will give control in some areas.
2. For **cranberry girdler larvae** infesting Douglas fir seedlings, direct spray at lower crown and stems following egg laying during summer. For nurseries: apply a minimum of 50 gallons of dilute spray per acre and irrigate immediately after application to move the insecticide into the top 1 to 2 inches of soil.
3. For **borers**, spray trunks and lower limbs of trees and shrubs when adults begin to emerge. For **peachtree borers**, spray flowering trees and shrubs of the genus *Prunus* as a trunk spray before newly-hatched larvae enter the trees and thoroughly wet all bark areas from ground level to scaffold limbs. Pheromone traps may aid in detection of adult clearwing moths. Consult your State Agricultural Experiment Station or Extension Service specialist for proper time to treat.
4. For control of **pales and northern pine weevil larvae**, apply as a cut stump spray or drench.
5. For **preventive treatment**, spray the main **trunk** of trees in the early spring or when threat of attack exists from nearby infested trees. For **remedial treatment**, spray the main trunk of infested trees or logs when damage occurs but before adult beetles begin to emerge.
6. For pine seedlings, treat immediately after transplanting. Treat each seedling with enough spray to thoroughly wet the foliage and stems to the point of runoff. For nurseries: do not use more than 6 gallons of spray dilution per acre.

#### (4) Ants, Termites, and Miscellaneous Pests (Ornamentals Growing Outdoors or in Nurseries)

Pest	Amount of Dursban 50W per	
	100 gallons	Acre
Ants Cockroaches (Such as: American, Asian wood, Brownbanded, German, Oriental, Smokey brown) Fire ants (foraging workers) Fire ants (mounds) (1) Sowbugs Springtails	1 lb (four 4 oz packets)	2 lb (eight 4 oz packets)
Carpenter ants (2) Termites	16 lb (sixty-four 4 oz packets)	-

#### Pest-Specific Directions

1. For individual **fire ant mounds** apply Dursban 50W insecticide as a drench. Dilute 0.75 lb of Dursban 50W (three 4 oz packets) per 50 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. For best results, apply in cool weather, 65-80° F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
2. If possible, locate carpenter ant nests and drench thoroughly.

#### Ornamentals (Dormant Spray of Tree Pests)

Use Dursban 50W insecticide as a dormant or delayed dormant spray at the rates indicated to control the listed insects.

Pest	Amount of Dursban 50W per 100 gallons <sup>1</sup>
Aphids (Such as: Mealy plum, Rosy apple, Woolly apple) Borers (such as: Peach twig) Cutworms (Such as: Climbing) Leafrollers (Such as: Oblique banded, Pandemis) Pear psylla adults Scale insects (Such as: San Jose)	0.5 to 1 lb (two to four 4 oz packets)

1. Based on 200 to 600 gallons per acre as a dilute spray.

#### General Use Directions

While Dursban 50W insecticide may be used without oil, oil is recommended to control additional pests such as European red mite.

For high volume (dilute) sprays, tank mix the specified dosage with 1 to 2 gallons of a petroleum spray oil recommended for dormant use in 100 gallons of water. Spray the entire tree to runoff using suitable ground spray equipment.

For low volume (concentrate) sprays (less than 200 gallons of spray mixture per acre), use the same amount of Dursban 50W insecticide as for a dilute spray and apply in a manner that will ensure thorough coverage of the trees. Use oil as recommended by your State Agricultural Experiment Station or Extension Service Specialist.

**Precautions:** Because cold dry conditions may cause Dursban 50W insecticide plus oil to infuse trees resulting in bud damage or drop, do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated. For nurseries: do not use more than 4 lb (sixteen 4 oz packets) of Dursban 50W insecticide per acre.

**Restrictions:** Make only one application during the dormant season. Do not allow meat or dairy animals to graze in treated areas.

#### Ornamentals (Pre-Plant Incorporation Treatment of Field Grown Nursery Stock)

Apply Dursban 50W insecticide to soil and incorporate before transplanting or planting to control white grubs during transplant or seedling establishment. Apply to the soil surface as a broadcast spray at a rate of 8 pounds per acre (thirty-two 4 oz packets) using sufficient water to obtain adequate coverage. Do not aerially apply. On the same day of the treatment, incorporate the insecticide into the top 2 to 4 inches of the soil using a tandem disc, field cultivator, or equivalent incorporation equipment capable of thorough soil mixing.

## Fruit, Nut, and Citrus Trees

Use Dursban 50W insecticide to treat **apple, almond, cherry, filbert, grapefruit, lemon, nectarine, pecan, peach, and walnut trees** or tree fruit not grown for commercial consumption which are infested with pests listed in the following table. A petroleum spray oil recommended for use on **citrus trees** may be added to spray mixtures only at rates of up to 1.8 gallons per 100 gallons of water to improve control of aphids, mealybugs, scale insects, and thrips. Treat when insects become a problem or in accordance with the local spray schedule recommended by your State Extension Service Specialist. **Note:** Numbers in parentheses following a listed pest refers to Pest-Specific Directions.

**Precautions:**

Do not apply as a foliar spray to **sweet cherries**. Contact of spray solution with leaves may result in premature leaf drop. Observe local use directions for tank mix combinations especially in regard to applications of Dursban 50W plus spray oil. Do not apply Dursban 50W insecticide in combination with oil to walnuts. Dry or cold conditions may cause Dursban 50W insecticide plus oil to infuse trees resulting in bud damage or drop, do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated. Do not apply when trees are stressed by drought or if temperature exceeds 95°F.

Pest	Amount of Dursban 50W per	
	100 gallons	Acre
Aphids (Such as: Apple, Black cherry, Black pecan, Filbert, Rosy apple, Woolly apple, Yellow pecan)	2 lb (eight 4 oz packets)	2 to 4 lb (eight to sixteen 4 oz packets)
Lesser appleworm		
Mineola Moth		
Mites (such as: European red, Pecan leaf scorch, Two spotted spider) (2)		
Apple Maggot		
Navel orangeworm		
Borers (Such as: American plum, Dogwood, Lesser peachtree, Pacific flathead, Peach twig, Peachtree, Shothole)		
Oriental fruit moth		
Pecan nut casebearer		
Pecan weevil		
Cherry fruit fly		
Periodical cicada		
Climbing cutworm		
<i>Phylloxera</i> spp.		
Codling Moth		
Plum curculio		
European apple sawfly		
Potato leafhopper		
Eyespotted bud moth		
Rose chafer		
European corn borer		
Scale insects (such as: San Jose, Walnut, European fruit lecanium)		
Fall webworm	4 lb (sixteen 4 oz packets)	4 to 8 lb (sixteen to thirty-two 4 oz packets)
Spittlebug		
Filbert worm		
Spotted tentiform leafminer		
Grasshoppers (1)		
Stinkbug		
Green fruitworm		
Tarnished plant bug		
Hickory shuckworm		
Tufted apple budmoth		
Katyids		
Walnut husk fly		
Leaf rollers and tiers (Such as: Avocado leafroller, Filbert leafroller, Fruit tree leafroller, Oblique banded leafroller, Omnivorous leaftier, Orange tortrix, Pandemis leafroller, Redbanded leafroller, Variegated leafroller)		
Western tussock moth	4 lb (sixteen 4 oz packets)	4 to 8 lb (sixteen to thirty-two 4 oz packets)
White apple leafhopper		
Winter moth		
Scale insects (Such as: Black scale, Brown soft scale, California red scale, Florida red scale, Snow scale, Chaff scale, Purple scale, Long scale) (3)		
Mealybugs	4 lb (sixteen 4 oz packets)	4 to 8 lb (sixteen to thirty-two 4 oz packets)
Thrips		

**Restrictions:**

**Apples:** Rate applied must not exceed 3 lb per 100 gallons. Make no more than 8 applications per season. Do not apply last treatment within 28 days before harvest or apply last two treatments closer than 21 days apart.

**Almonds, Walnuts, Filberts:** Rate applied must not exceed 4 lb per 100 gallons. Make only one dormant/delayed dormant spray application and no more than three foliar spray applications on almonds per season; one dormant/delayed dormant spray application and no more than two foliar spray applications on walnuts per season, and no more than three foliar spray applications on filberts per season. Do not apply within 14 days of harvest.

**Citrus:** Do not apply to flowering trees. Do not apply when temperature exceeds 95°F. Do not apply more than two applications per fruit year. Do not make a second application within 30 days of the first application. Do not pick fruit for consumption until 21 days after application.

**Pecans:** Rate applied must not exceed 2 lb per 100 gallons. Make no more than 5 applications per season. Do not apply within 28 days of harvest.

**Sour cherries:** Rate applied must not exceed 3 lb per 100 gallons. Make no more than 8 applications per season. Do not apply within 14 days of harvest.

**Sweet cherries (trunk and lower limb sprays only):** Rate applied must not exceed 2 lb per 100 gallons. Avoid spray contact with foliage (leaves) since premature leaf drop may result. Make only three applications per year. Do not apply within 6 days of harvest.

**Peaches, Nectarines (trunk sprays only):** Do not allow spray to contact fruit. Make only one application per season. Do not apply within 14 days of harvest.

## Pest-Specific Directions

1. **Lubber grasshoppers** must be controlled when they are small (less than 1 inch in length) by direct contact with spray.
2. For effective control of **spider mites** when large numbers of eggs are present, apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly hatched nymphs.
3. For control of Black scale, Brown soft scale, California red scale, and Chaff scale in Arizona, California and Texas in nurseries, apply 8 lb (thirty-two 4 oz packets) of Dursban 50W per acre (8 lb/100 gal).

## Turf and Other Outdoor Uses

**Note:** Worker Protection Standard (WPS) requirements apply to applications of this product made to turf grown for sale or other commercial use such as sod, or commercial seed production, or for research purposes. Lawn care and golf course applications are not within the scope of the WPS.

Use Dursban 50W insecticide to control the pests listed in the following table by application at the recommended dosages.

Pest		Amount of Dursban 50W per Acre
Ants Armyworm (such as: Beet, Fall, Yellowstriped) Chiggers (1) Chinch bugs Crickets Cutworms Deer ticks (2) Earwigs European crane fly larvae Fiery skipper Fire ants (foraging workers) Fire ants (mounds) (3) Fleas	Grasshoppers Greenbugs Green June beetle grubs Leafhoppers Lucerne moth Millipedes Mites (Such as: Clover, Bermudagrass stunt, Winter grain) Mosquitoes (4) Pillbugs Sod webworms (lawn moths) (5) Sowbugs Springtails Ticks (1)	2 lb (eight 4 oz packets)
Billbugs (Such as: Bluegrass, Denver, Hunting) (6)		2 to 4 lb (eight to sixteen 4 oz packets)
Black turfgrass ataenius (7) Annual bluegrass weevil ( <i>Hyperodes</i> ) (8)		4 lb (sixteen 4 oz packets)
Mole Crickets (9)		4 to 6 lb (sixteen to twenty four 4 oz packets)
White grubs (Such as: Black turfgrass ataenius, European chafer, Southern masked chafer and Japanese beetle larvae) (10)		4 to 8 lb (sixteen to thirty-two 4 oz packets)
Imported fire ants in commercial sod (11)		16 lb (sixty-four 4 oz packets)

#### General Use Directions

Dilute Dursban 50W insecticide in water and apply using suitable application equipment. For best results, turf should be moist at time of treatment. **Note:** Numbers in parentheses following a listed pest refers to Pest-Specific Directions.

#### Pest-Specific Directions

1. Use Dursban 50W insecticide for area control of **ticks** and **chiggers** infesting non-cropland areas such as roadsides, footpaths and trails, picnic and camping site, parks and other recreational areas where these pests are present and create a nuisance or a possible public health problem. Do not allow public use of treated areas during application or until spray has dried. Apply Dursban 50W insecticide in water at the rate of 0.25 lb per acre (one 4 oz packet) using a hydraulic sprayer, mist applicator, backpack sprayer, or other suitable hand or power operated spray equipment.
2. For control of **deer ticks** apply Dursban 50W insecticide in water at the rate of 2 lb per acre (eight 4 oz packets). Treat low underbrush, turf, grassy areas, weeds, ground surface and debris, using enough spray volume to obtain thorough coverage.
3. For individual **fire ant mounds** apply Dursban 50W insecticide as a drench. Dilute 0.75 lb Dursban 50W (three 4 oz packets) per 50 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. For best results, apply in cool weather, 65-80° F, or in early morning or late evening hours.

Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.

4. For **Mosquitoes** coming to rest on areas treated for control of turf pests will be controlled for varying periods of time after treatment depending on exposure of treated areas to weathering conditions.
5. For **sod webworms**, delay watering or mowing of the treated area for 12 to 24 hours after treatment.
6. For **billbugs**, spray early in the season just prior to, or coinciding with first appearance of adults as recommended by your local Agricultural Extension Service Specialist.
7. For **black turfgrass ataenius** adults, spray early in the season as recommended by your local Agricultural Extension Service Specialist. A repeat application may be needed 1 to 2 weeks later.
8. To control **annual bluegrass weevil**, spray suspected problem areas in mid-April and again in Mid-May, or as recommended by your local Agricultural Extension Service Specialist.
9. To control mole crickets in turfgrass, apply Dursban 50W insecticide in a minimum spray volume of 50 gallons of water per acre using broadcast or suitable hand held application equipment. Apply when early stage nymphs are active. Efficacy may be enhanced by spraying late in the afternoon or early evening and irrigating the turf prior to treatment to move mole crickets to the soil surface.
10. For **white grubs**, spray when grubs are young and actively feeding near the soil surface, usually during late July and August or as recommended by your local Agricultural Extension Service Specialist.

For best results, soil should be moist prior to treatment. **For best results, immediately after spraying, irrigate the treated area with 1/2 to 1 inch of water to wash the insecticide into the underlying soil.**

11. Imported **fire ants on sod farms**: Apply Dursban 50W as a spray to the area of sod to be cut. Immediately after application, irrigate treated area with at least 1/2 acre-inch of water or a sufficient volume to thoroughly soak below the cut line. Do not apply a volume or rate of water to cause runoff. Sod can be cut when vegetation has dried and when soil is moist but not wet.

**Precaution (Additional PPE Requirements)**: In addition to PPE listed in this label for WPS uses, elbow-length waterproof gloves, chemical-resistant apron and chemical-resistant footwear plus socks must be worn to prevent repeated skin exposure to treated sod.

**Certification Period**: 42 days from day of application.

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### Warranty Disclaimer

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Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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### Inherent Risks of Use

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It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

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### Limitation of Remedies

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The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

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Label Code: D02-091-031  
Replaces label: 113-10-030

EPA Accepted 04-08-96

### Revisions:

DowElanco notified the EPA that its legal name will change to Dow AgroSciences LLC effective January 1, 1998. The following label changes are being made via non-notification as a result of this company name change:

- Company name changed from DowElanco to Dow AgroSciences LLC (logo, trademark reference, address line, warranty statement)
- Emergency telephone number updated to include a web site address (PR Notice 97-4)

The name of this product and its EPA registration number remain the same. No other changes are being made to the label at this time.